CLAIMS

1. Marking tape comprising at least one passive resonant circuit having a selected resonance frequency, each resonant circuit comprising an inductive coil being formed by a conductive material layer (2) on one surface of a dielectric plastic film (1), and a capacitor being formed by a conductive layer (4) on one side of the dielectric plastic film (1) and an oppositely positioned conductive layer (3) on the opposite side of the dielectric plastic film (1), c h a r a c t e r i s e d by the inductive coils each having only a few windings, preferably one single winding, and having a sufficient size and dimensioning to be wireless detected when positioned in a hidden place such as an underground position.

2. Marking tape in accordance with claim 1, c h a r a c t e r i s e d by the conducting material layers (2, 3, 4) providing the coils and capacitors being formed on the surfaces of the dielectric plastic film (1) in such a way that a possible break in the marking tape results in a loss of resonance or displacement of resonance frequency of at least one of the resonant circuits.

3. Marking tape in accordance with any of the preceding claims, c h a r a c t e r i s e d by different resonance frequencies (F1, F2, F3) being provided for marking different objects.

4. Marking tape in accordance with claim 3, c h a r a c t e r i s e d by the capacitors being formed with finger-like patches (3a-c, 4a-d), which can be selectively disconnected from the rest of the capacitors in order to change the resonance frequencies of the resonant circuits.

5. Marking tape in accordance with any of the preceding claims, c h a r a c t e r i s e d by the provision of different resonance frequencies (F1, F2, F3) for individual resonance circuits on the same marking tape.

6. Marking tape in accordance with any of the preceding claims, c h a r a c t e r i s e d by the marking tape being directly connected to or integrated in the object (7) to be marked and detected.

7. Marking tape in accordance with any of the preceding claims, c h a r a c t e r i s e d by comprising a distance layer provided on at least one side of the dielectric plastic film (1) and the conducting material layers (2, 3) in order to provide an isolating distance from a few micrometers to several millimetres to possible surrounding conducting materials.

8. Marking tape in accordance with any of the preceding claims, c h a r a c t e r i s e d by the inductive coils being of elongate form extending primarily in longitudinal direction of the marking tape.

9. Marking tape in accordance with claim 8, c h a r a c t e r i s e d by the inductive coils having a length of approximately 0.1-1.5 m.

10. Marking tape in accordance with any of the preceding claims, c h a r a c t e r i s e d by the coil winding(s) having a resistance (R) below 1Ω.

11. Marking tape in accordance with any of the preceding claims, c h a r a c t e r i s e d by said marking tape being integrated in a geotextile material in order to be able to detect the integrity thereof.

12. Method of using a marking tape in accordance with any of the preceding claims, c h a r a c t e r i s e d by comprising the steps of:
positioning the marking tape in a vehicle-supporting structure, such as a railway track substructure or a road substructure, and
detecting the integrity of the marking tape and thus the integrity of the supporting structure by detecting the presence of and integrity of the resonant circuits of the marking tape.

13. Method in accordance with claim 12, c h a r a c t e r i s e d by comprising the steps of:
providing the marking tape with a predetermined number (2N) of sequentially positioned resonant circuits alternatingly having two different resonant frequencies (F1, F2) and followed by a resonant circuit with a third resonant frequency (F3), and
detecting (11) the integrity of the marking tape and thus the supporting structure from a moving vehicle (10) moving on the vehicle-supporting structure by detecting

the number (N_m) of frequency changes between the two frequencies (F1, F2) before the detection of the third frequency (F3) and controlling that the counted number of frequency changes (N_m) equals the predetermined number of expected frequency changes (N).

14. Method of using a marking tape in accordance with any of the claims 1-11, c h a r a c t e r i s e d by comprising the steps of:

providing individual resonant circuits (14) on individual marking tapes, said tapes being formed in accordance with a structure (15), on which they are to be positioned in order to be able to detect the integrity of said structures (15), and

mounting said individual resonant circuits (14) on the individual marking tapes on said structures (15) before these are hidden in an overall construction, such as e.g. the roof construction or the floor construction of a house, whereby the integrity of connections between different parts of the construction (15) can be detected in a non-invasive manner by means of suitably constructed activating and detecting devices.